

Fernando Miguel Mancilla

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EDUCATION

B.S Computer Science

University of Houston, TX

Expected Graduation 2025

A.S Computer Science

Lone Star College, TX

SKILLS

**Data Science, Data Structures & Algorithms,
Software Design, Database Structures, Game Design, Game Development,
Python, Java, C, C++, HTML, CSS, JavaScript, Typescript, Markdown
Flask, React, AWS, Docker, Unity, Git, IntelliJ, ASP.Net
PostgreSQL, Microsoft SQL Server**

PROJECTS

Student Forms Submission

- Collaborated with a team to develop a student form submission web-app utilizing Flask
- Learned how to integrate PostgreSQL into a web application
- Developed an approval process where verified users can delegate forms to other users
- Expanded on admin functionalities to allow more modulation

Library Database Web Application

- Co-developed a full-stack web application for a library system using React, .NET, and Microsoft SQL Server
- Engineered database architecture and implemented complex SQL queries and triggers to manage inventory, user accounts, events, and fines.
- Designed and integrated dynamic user profile management and role-based access control
- Developed backend services to handle real-time features including waitlists, overdue fine generation, and email notifications
- Collaborated in Agile sprints, contributed to system documentation, and implemented secure, scalable database solutions adhering to data integrity constraints

Cyberpunk 2077 Modding

- Integrated texture remaps and developed scripts within the software
- Streamlined function processes for a better user experience
- Created modifications to existing textures using in-house tools
- Designed game modifications utilizing the Wolvenkit software

Halo CE Mod Tools

- Conceptualized a redesign of a multiplayer game mode
- Experimented with lighting on maps to create a more dynamic scene
- Modified original gameplay with new enemy placements

RELEVANT COURSEWORK

- COSC 2436 - Programming and Data Structures
- COSC 3380 - Data Science 1, COSC 4337 - Data Science 2
- GAME 1303 - Intro to Game Design & Development